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March 29, 2012

Director of Engineering
Kentucky Public Service Commission
P.O. Box 615
Frankfort, Kentucky 40602-0615

RE: Administrative Case No. 2006-00494

Enclosed are the original and five (5) copies of the 2011 Distribution Reliability Report, for Owen Electric Cooperative, as requested in the aforementioned order.

Should you have any questions or need further information, please contact our office

Sincerely,

A handwritten signature in cursive script that reads "Rusty Williams".

Rusty Williams
Vice President of Operations

Enclosures

KENTUCKY PUBLIC SERVICE COMMISSION

Electric Distribution Utility Annual Reliability Report

SECTION 1: CONTACT INFORMATION

UTILITY NAME	1.1	<u>Owen Electric Cooperative</u>
REPORT PREPARED BY	1.2	<u>James Petreshock</u>
E-MAIL ADDRESS OF PREPARER	1.3	<u>jpetreshock@owenelectric.com</u>
PHONE NUMBER OF PREPARER	1.4	<u>(502) 563 - 3492</u>

SECTION 2: REPORT YEAR

CALENDAR YEAR OF REPORT	2.1	<u>2011</u>
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SECTION 3: MAJOR EVENT DAYS

T_{MED}	3.1	<u>12.40</u>
FIRST DATE USED TO DETERMINE T_{MED}	3.2	<u>01/01/06</u>
LAST DATE USED TO DETERMINE T_{MED}	3.3	<u>12/31/10</u>
NUMBER OF MED IN REPORT YEAR	3.4	<u>2</u>

NOTE: Per IEEE 1366 T_{MED} should be calculated using the daily SAIDI values for the five prior years. If five years of data are not available, then utilities should use what is available until five years are accumulated.

SECTION 4: SYSTEM RELIABILITY RESULTS

Excluding MED

SAIDI	4.1	<u>157.19</u>
SAIFI	4.2	<u>1.43</u>
CAIDI	4.3	<u>109.98</u>

Including MED (Optional)

SAIDI	4.4	<u>195.35</u>
SAIFI	4.5	<u>1.60</u>
CAIDI	4.6	<u>121.75</u>

Notes:

- 1) All duration indices (SAIDI, CAIDI) are to be reported in units of minutes.
- 2) Reports are due on the first business day of April of each year
- 3) Reports cover the calendar year ending in the December before the reports are due.
- 4) IEEE 1366 (latest version) is used to define SAIDI, SAIFI, CAIDI, and T_{MED}

KENTUCKY PUBLIC SERVICE COMMISSION

Electric Distribution Utility Annual Reliability Report

SECTION 5: OUTAGE CAUSE CATEGORIES

Excluding MED

CAUSE CODE DESCRIPTION		SAIDI VALUE	CAUSE CODE DESCRIPTION		SAIFI VALUE
Weather	5.1.1	73.60	Weather	5.2.1	0.42
Member/Public	5.1.2	13.24	Power Supplier	5.2.2	0.22
Unknown	5.1.3	12.31	Unknown	5.2.3	0.19
Power Supplier	5.1.4	12.06	Equipment/Installation	5.2.4	0.12
Age/Deterioration	5.1.5	11.01	Member/Public	5.2.5	0.12
Scheduled	5.1.6	9.14	R.O.W. Unpreventable	5.2.6	0.10
Equipment/Installation	5.1.7	7.98	Scheduled	5.2.7	0.09
R.O.W. Unpreventable	5.1.8	6.43	Birds/Animals	5.2.8	0.09
R.O.W. Preventable	5.1.9	6.04	Age/Deterioration	5.2.9	0.07
Birds/Animals	5.1.10	5.50	R.O.W. Preventable	5.2.10	0.06

SECTION 6: WORST PERFORMING CIRCUITS

CIRCUIT IDENTIFIER		SAIDI VALUE	MAJOR OUTAGE CATEGORY
BIG BONE (1201)	6.1.1	1337.61	Weather
STERLING (2501)	6.1.2	735.95	Member/Public
STERLING (2503)	6.1.3	669.77	Weather
GALLATIN (1802)	6.1.4	537.24	Weather
WILLIAMSTOWN (0502)	6.1.5	493.59	Weather
BULLITSVILLE (0802)	6.1.6	471.44	Member/Public
GRANTSLICK (0304)	6.1.7	445.82	Weather
GRANTSLICK II (5106)	6.1.8	433.20	Weather
CARSON (1102)	6.1.9	422.48	Weather
CARSON (1103)	6.1.10	410.65	Weather

CIRCUIT IDENTIFIER		SAIFI VALUE	MAJOR OUTAGE CATEGORY
GALLATIN (1802)	6.2.1	8.81	Weather
CARSON (1101)	6.2.2	5.05	Weather
KEITH I (1303)	6.2.3	3.26	Weather
WILLIAMSTOWN (0504)	6.2.4	3.00	Weather
BULLISTVILLE (0802)	6.2.5	2.98	Weather
STERLING (2503)	6.2.6	2.83	Weather
PENN (0704)	6.2.7	2.53	Weather
BOONE (0102)	6.2.8	2.52	Weather
BROMLEY (0601)	6.2.9	2.49	Weather
CARSON (1103)	6.2.10	2.46	Weather

KENTUCKY PUBLIC SERVICE COMMISSION

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Additional pages may be attached as necessary

SECTION 7: VEGETATION MANAGEMENT PLAN REVIEW

Owen Electric's Vegetation Management Plan, depending on budget, is an aggressive 4-yr. trim cycle covering our operating territory. OEC maintains a 2-yr. intermediate trim cycle extending from the substation to the first set of breakers; new in 2011 we will extend past those breakers all the way to the end of the three phase line. Owen employs a comprehensive herbicide spray program covering our entire operating area, again, in a 4-yr. cycle. Circuit spraying is done the year following the circuit trim to allow the tender re-sprouts to fully absorb the herbicide.

Our vegetation management plan is fluid and can be adjusted easily to allow for rainfall, drought, and differences in soil fertility and soil structure. If a circuit needs to be attended sooner than scheduled, or later, it can be done.

KENTUCKY PUBLIC SERVICE COMMISSION

SECTION 8: UTILITY COMMENTS

During the course of 2011, in particular the month of April, OEC experienced two Major Event days and near record rainfall. As a result of the record rainfall there were nearly 589 meters that were affected by flooding, and nearly 100 of these were without power for 3 – 15 days due to elevated water levels. These events contributed noticeably to the overall reliability indices at the system and feeder levels. *OEC has several initiatives that are ongoing to minimize the impact and speed in the restoration of outages caused by weather. The Feeder Hardening program is in its fourth year. OEC has also implemented an ongoing over-current protection review of each feeder prioritized by operational feedback and length of feeder. The 10-WPC's are the driver for these programs.*

A State-funded (DEDI) "smart-grid" self-healing project was granted to OEC in April 2010 and was deployed in April of 2011. This project involves two distribution feeders in OEC's Scott County service area; both of which appeared previously on the 10 WPC's. The purpose of this project is to transfer a large number of interrupted customers to an automatically switched ("self-healed") energized feeder, thereby significantly reducing interruption times. This system experienced 4 "healing" events over the course of the year and after a detailed analysis, review, and reconfiguration of the system after the first three events which performed sub-optimally the final event operated exactly as desired. This last event reduced overall member minutes out by 76%.

Lastly OEC has several very long, 25kV feeders that by nature routinely appear on the 10 WPC's. OEC continues working on future plans to address these feeders with new substations that will shorten the feeder lengths and provide improvements in reliability. Until these substations can be implemented, initiatives such as feeder hardening, focused ROW clearing, and increased sectionalizing will continue to be considered.